Application Number: 10/630,736

Our Ref: Q76736 Art Unit: 2878

Art Unit: 28/8

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

**LISTING OF CLAIMS:** 

Claim 1 (CURRENTLY AMENDED) An image recording medium comprising a support

permeable to a reading electromagnetic wave and a first electrode layer permeable to the reading

electromagnetic wave, a reading photoconductive layer which exhibits conductivity upon

exposure to the reading electromagnetic wave, a charge accumulating portion which accumulates

an electric charge of a latent image polarity generated in a recording photoconductive layer, the

recording photoconductive layer which exhibits conductivity upon exposure to a recording

electromagnetic wave and a second electrode layer permeable to the recording electromagnetic

wave which are superposed on the support one on another in this order,

wherein the recording photoconductive layer is formed of a material containing a-Se as a

major component and doped with a material for suppressing bulk crystallization of a-Se, and

wherein the second electrode layer is formed on the recording photoconductive layer by

vapor deposition.

Claim 2 (ORIGINAL) An image recording medium as defined in Claim 1 in which said

material for suppressing bulk crystallization of a-Se is As.

2

Application Number: 10/630,736

Our Ref: Q76736 Art Unit: 2878

Claim 3 (ORIGINAL) An image recording medium as defined in Claim 2 in which said at

least one of the recording photoconductive layer and the reading photoconductive layer is doped

with As in an amount of 0.1 to 0.5atom%.

Claim 4 (ORIGINAL) An image recording medium as defined in Claim 2 in which said at

least one of the recording photoconductive layer and the reading photoconductive layer is doped

with Cl in addition to As.

Claim 5 (ORIGINAL) An image recording medium as defined in Claim 4 in

which said at least one of the recording photoconductive layer and the reading

photoconductive layer is doped with Cl in amount of 10 to 50ppm.

Claim 6 (ORIGINAL) An image recording medium as defined in Claim 1 in which the

recording photoconductive layer is 400 to 1000µm in thickness.

Claim 7 (ORIGINAL) An image recording medium as defined in Claim 6 in which the

recording photoconductive layer is 700 to 1000µm in thickness.

Claim 8 (CURRENTLY AMENDED) An image recording medium comprising a support

permeable to a reading electromagnetic wave and a first electrode layer permeable to the reading

electromagnetic wave, a reading photoconductive layer which exhibits conductivity upon

3

Application Number: 10/630,736

superposed on the support one on another in this order,

Our Ref: Q76736 Art Unit: 2878

exposure to the reading electromagnetic wave, a charge transfer layer which behaves like a substantially insulating material to an electric charge of a latent image polarity generated in a recording photoconductive layer and behaves like a substantially conductive material to the electric charge of the polarity opposite to the latent image polarity, the recording photoconductive layer which exhibits conductivity upon exposure to a recording electromagnetic wave and a second electrode layer permeable to the recording electromagnetic wave which are

wherein the charge transfer layer is formed of a material containing a-Se as a major component and doped with a material for suppressing bulk crystallization of a-Se, and

wherein the second electrode layer is formed on the recording photoconductive layer by vapor deposition.

Claim 9 (ORIGINAL) An image recording medium as defined in Claim 8 in which the charge transfer layer is doped with As in an amount of 0.1 to 0.5 atom% and with Cl in amount of 10 to 50ppm.

Claim 10 (ORIGINAL) An image recording medium as defined in Claim 8 in which the recording photoconductive layer is 400 to 1000µm in thickness.

Claim 11 (ORIGINAL) An image recording medium as defined in Claim 10 in which the recording photoconductive layer is 700 to 1000µm in thickness.

4

Application Number: 10/630,736

Claim 12 (CURRENTLY AMENDED) A method of manufacturing an image recording medium comprising a support permeable to a reading electromagnetic wave and a first electrode layer permeable to the reading electromagnetic wave, a reading photoconductive layer which exhibits conductivity upon exposure to the reading electromagnetic wave, a charge accumulating portion which accumulates an electric charge of a latent image polarity generated in a recording photoconductive layer, the recording photoconductive layer which exhibits conductivity upon exposure to a recording electromagnetic wave and a second electrode layer permeable to the recording electromagnetic wave which are superposed on the support one on another in this order, the method characterized in that the recording photoconductive layer is formed in a

Our Ref: Q76736

Art Unit: 2878

wherein the second electrode layer is formed on the recording photoconductive layer by vapor deposition, after the recording photoconductive layer is formed.

therein Se as a major component and doped with 0.1 to 0.5 atom% of As and 10 to 50 ppm of Cl,

thickness of 200 to 1000µm by resistance heating deposition of an alloy material containing

Claim 13 (PREVIOUSLY PRESENTED) A method as defined in Claim 12 in which the recording photoconductive layer is formed in a thickness of 400 to 1000 im.

Claim 14 (PREVIOUSLY PRESENTED) A method as defined in Claim 13 in which the recording photoconductive layer is formed in a thickness of 700 to 1000µm.

Application Number: 10/630,736

Our Ref: Q76736 Art Unit: 2878

Claim 15 (CURRENTLY AMENDED) A method of manufacturing an image recording medium comprising a support permeable to a reading electromagnetic wave and a first electrode layer permeable to the reading electromagnetic wave, a reading photoconductive layer which exhibits conductivity upon exposure to the reading electromagnetic wave, a charge transfer layer which behaves like a substantially insulating material to an electric charge of a latent image polarity generated in a recording photoconductive layer and behaves like a substantially conductive material to the electric charge of the polarity opposite to the latent image polarity, the recording photoconductive layer which exhibits conductivity upon exposure to a recording electromagnetic wave and a second electrode layer permeable to the recording electromagnetic wave which are superposed on the support one on another in this order, the method characterized in that the recording photoconductive layer is formed in a thickness of 200 to 1000µm by resistance heating deposition of an alloy material containing therein Se as a major component and doped with 0.1 to 0.5atom% of As and 10 to 50ppm of Cl,

wherein the second electrode layer is formed on the recording photoconductive layer by vapor deposition, after the recording photoconductive layer is formed.

Claim 16 (ORIGINAL) A method as defined in Claim 15 in which the recording photoconductive layer is formed in a thickness of 400 to 1000µm.

Claim 17 (ORIGINAL) A method as defined in Claim 16 in which the recording photoconductive layer is formed in a thickness of 700 to 1000µm.

Claims 18-52 (CANCELLED)